

Title (en)
CONVERTER CIRCUIT AND CORRESPONDING METHOD

Title (de)
WANDLERSCHALTUNG UND ENTSPRECHENDES VERFAHREN

Title (fr)
CIRCUIT CONVERTISSEUR ET PROCÉDÉ CORRESPONDANT

Publication
EP 3413450 A1 20181212 (EN)

Application
EP 18174257 A 20180525

Priority
IT 201700060981 A 20170605

Abstract (en)
A converter circuit, for example, for powering lighting devices, comprising: - a supply node (+V) and an output node (+Out) of the converter circuit, - a half-bridge arrangement coupled to the supply node (+V) and including a pair of electronic switches (MOS1, MOS2) alternatively switchable between conductive and non-conductive states with a drive node (A) therebetween, - a transformer (T) with a primary winding (Wp1) driven by the drive node (A) and a secondary winding including two portions (Ws1, Ws2) with a center tap node (B) coupled to the output node (+Out) of the converter circuit, - an inductive component (10) including two magnetically coupled winding halves (Li1, Li2) with a respective center tap node (C), the inductive component (10) being coupled to the ends of the secondary winding of the transformer with the respective center tap node (C) coupled to the output node (+Out) of the converter circuit.

IPC 8 full level
H02M 3/337 (2006.01); **H02H 9/00** (2006.01)

CPC (source: EP US)
H02H 7/125 (2013.01 - US); **H02M 1/34** (2013.01 - US); **H02M 3/01** (2021.05 - EP US); **H02M 3/33571** (2021.05 - EP US); **H02M 3/3376** (2013.01 - US)

Citation (search report)

- [Y] JP S63186561 A 19880802 - MELS CORP, et al
- [Y] JP S53104806 A 19780912 - AUTOMATIC POWER INC
- [Y] US 7187531 B1 20070306 - CHEN DAOSHEN [US]
- [Y] US 4245288 A 19810113 - FROSCH ROBERT A ADMINISTRATOR, et al
- [Y] US 7313003 B2 20071225 - NAKAHORI WATARU [JP], et al

Citation (examination)
US 2010321960 A1 20101223 - NAKAHORI WATARU [JP]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3413450 A1 20181212; **EP 3413450 A8 20190306**; US 10574149 B2 20200225; US 2018351461 A1 20181206

DOCDB simple family (application)
EP 18174257 A 20180525; US 201815992215 A 20180530